

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
16 December 2004 (16.12.2004)

PCT

(10) International Publication Number  
**WO 2004/108955 A1**

(51) International Patent Classification<sup>7</sup>: **C12Q 1/68**,  
C12N 15/00, A01K 67/00

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(21) International Application Number:  
PCT/AU2004/000749

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(22) International Filing Date: 4 June 2004 (04.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
2003902788 4 June 2003 (04.06.2003) AU

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS OF IDENTIFYING COMPOUNDS WHICH MODULATE GRANULOCYTE-COLONY STIMULATING FACTOR (G-CSF) DEPENDENT PROCESSES BY MODULATION OF THE LEVELS OF A SUPPRESSOR OF CYTOKINE SIGNALING (SOCS)

(57) Abstract: The present invention relates generally to compounds which modulate cytokine-dependent processes. More particularly, the compounds of the present invention modulate responses to a colony stimulating factor and even more particularly to granulocyte-colony stimulating factor (G-CSF) by modulating the levels of molecules which inhibit G-CSF such as but not limited to a suppressor of cytokine signaling (SOCS) and in particular SOCS-3. The present invention further contemplates methods for regulating G-CSF-dependent processes by contacting cells in vitro with or administering to a subject a compound which up- or down-regulates the level of activity of G-CSF by modulating the level or activity of a SOCS molecule such as SOCS-3. The instant compounds are further useful for modulating a range of G-CSF-induced cellular responses including neutrophil recovery after chemotherapy or radiotherapy, mobilizing stem and progenitor cells, treating infection and treating inflammatory conditions.

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